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Fig. 1

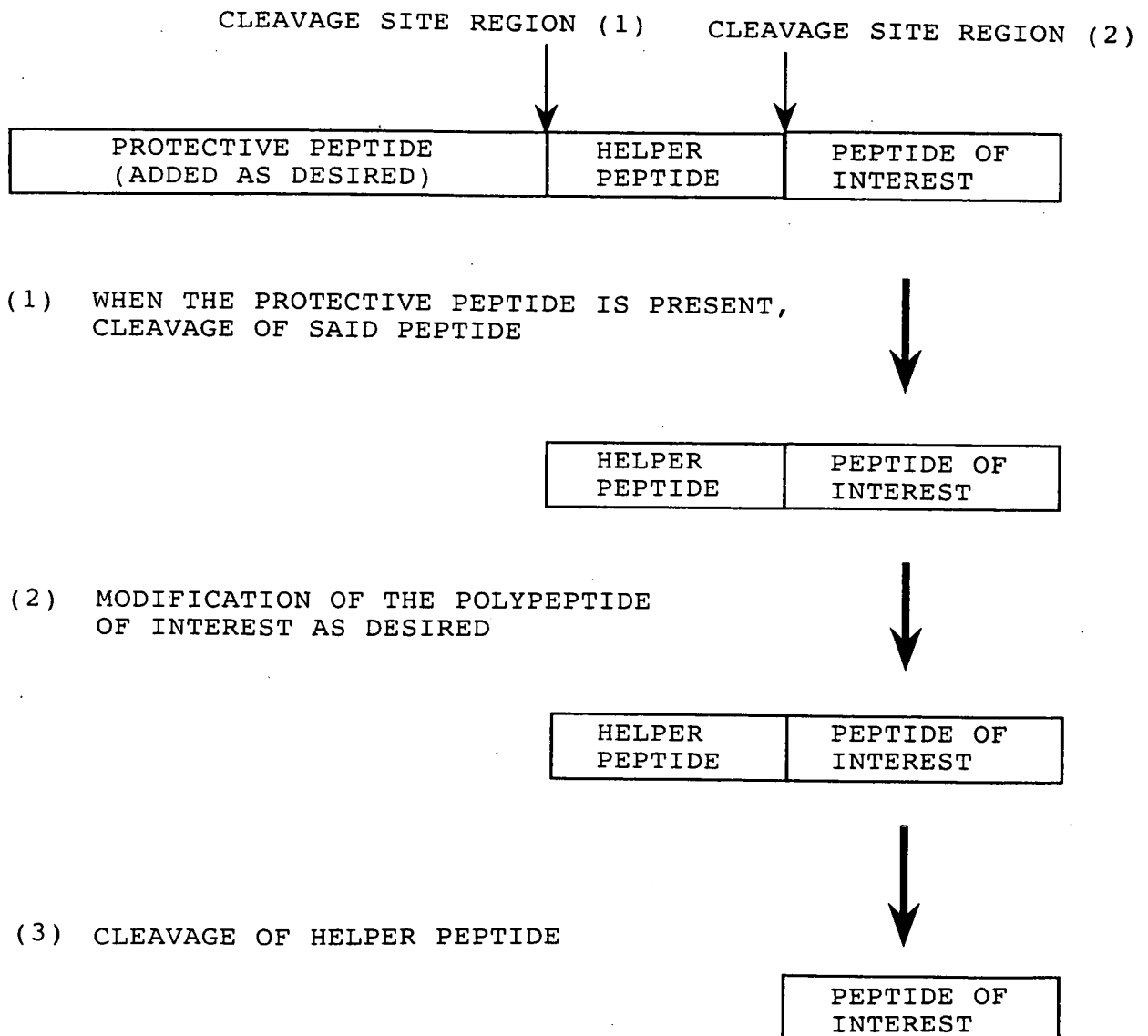


Fig. 2

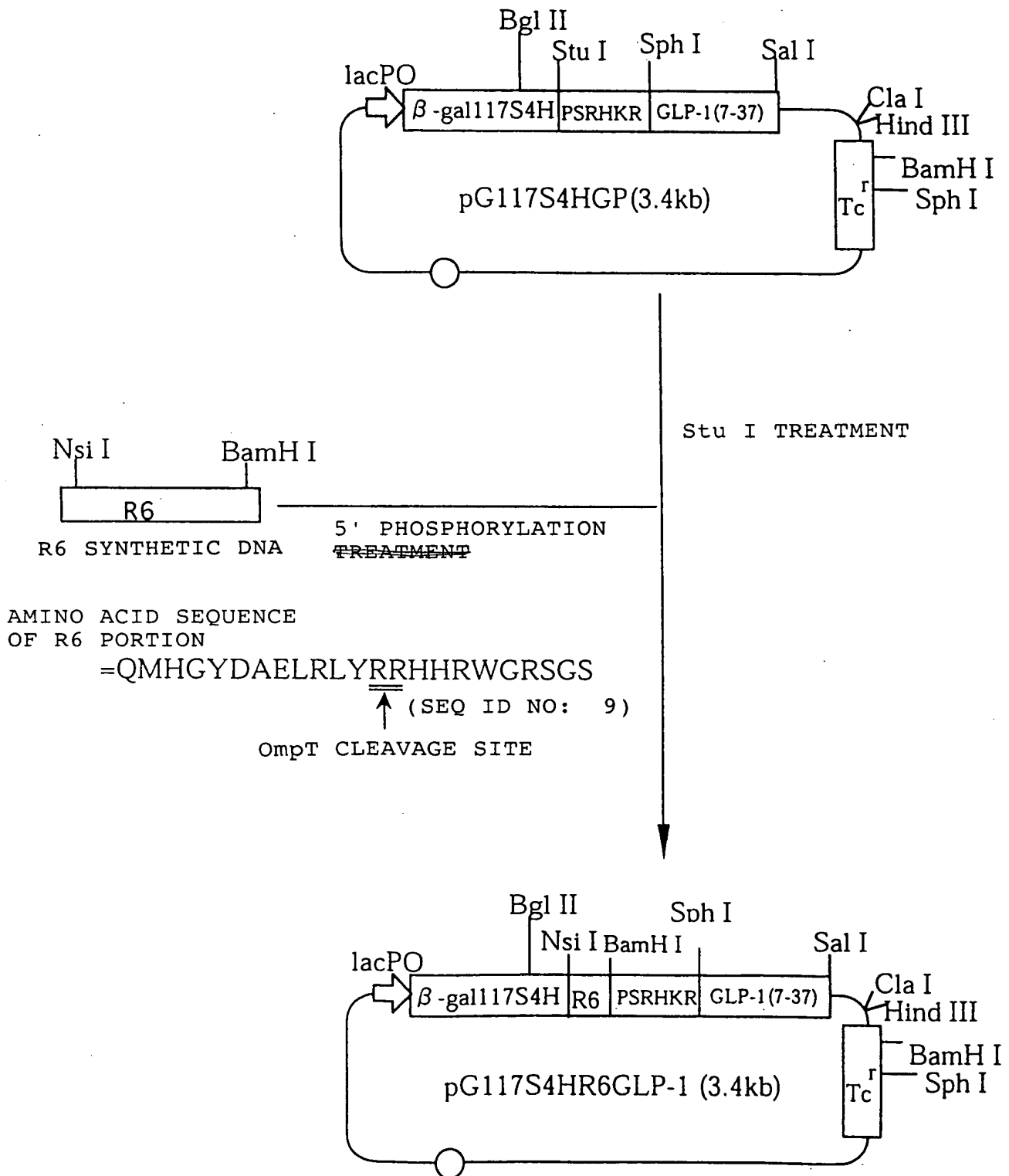
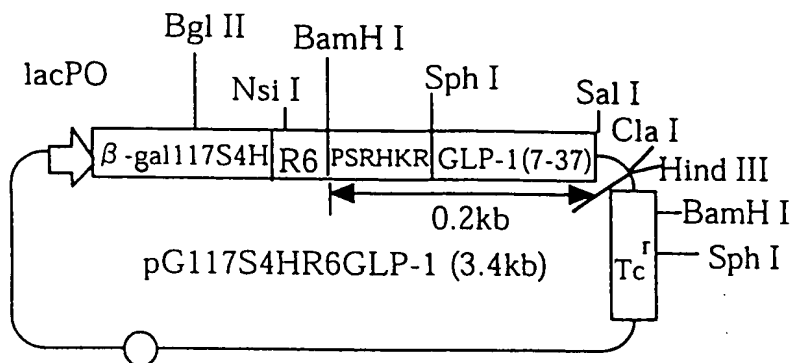
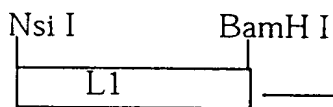
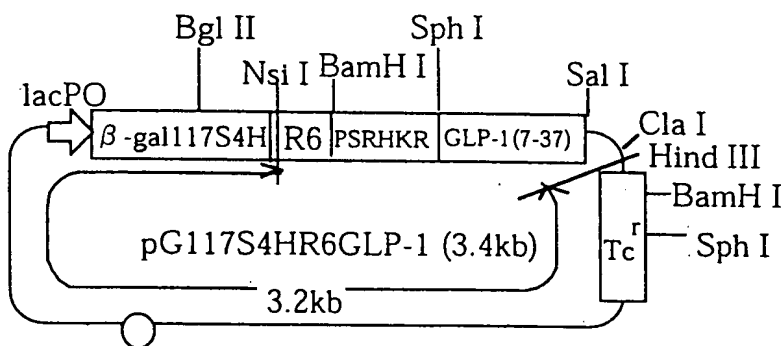


Fig. 3



BamH I, Hind III TREATMENT  
RECOVER 0.2 kb FRAGMENT  
(DNA FRAGMENT B)



L1 SYNTHETIC DNA

5' PHOSPHORYLATION  
TREATMENT

AMINO ACID SEQUENCE  
OF L1 PORTION

=QM<sup>+</sup>HGYDAELRLYRRHHGSGS

(SEQ ID NO: 10)

OmpT CLEAVAGE SITE

Nsi I, Hind III TREATMENT  
RECOVER 3.2 kb FRAGMENT  
(DNA FRAGMENT A)

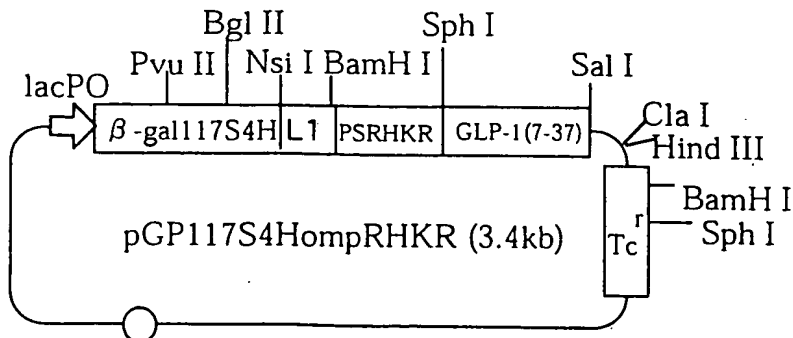


Fig. 4

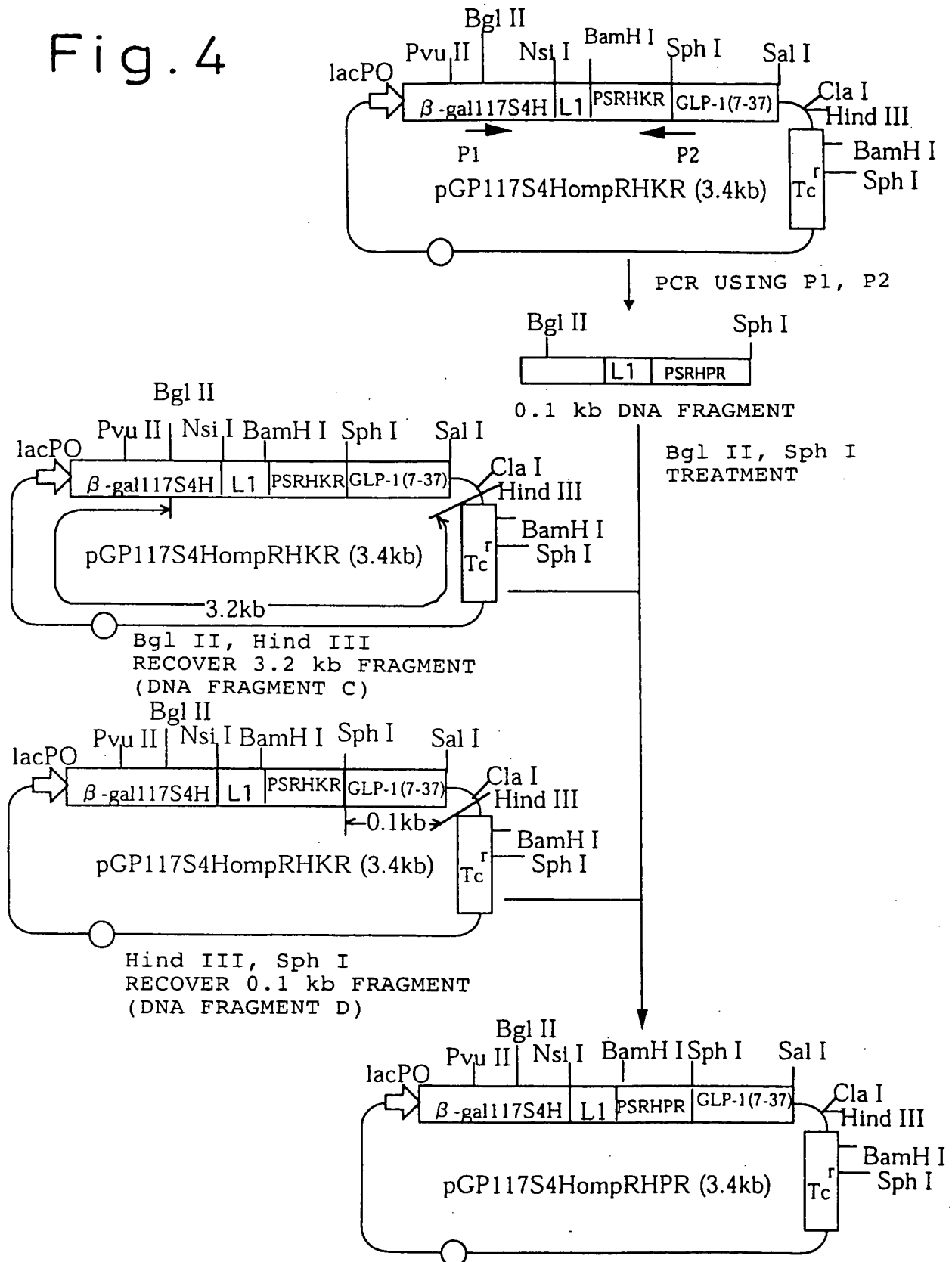
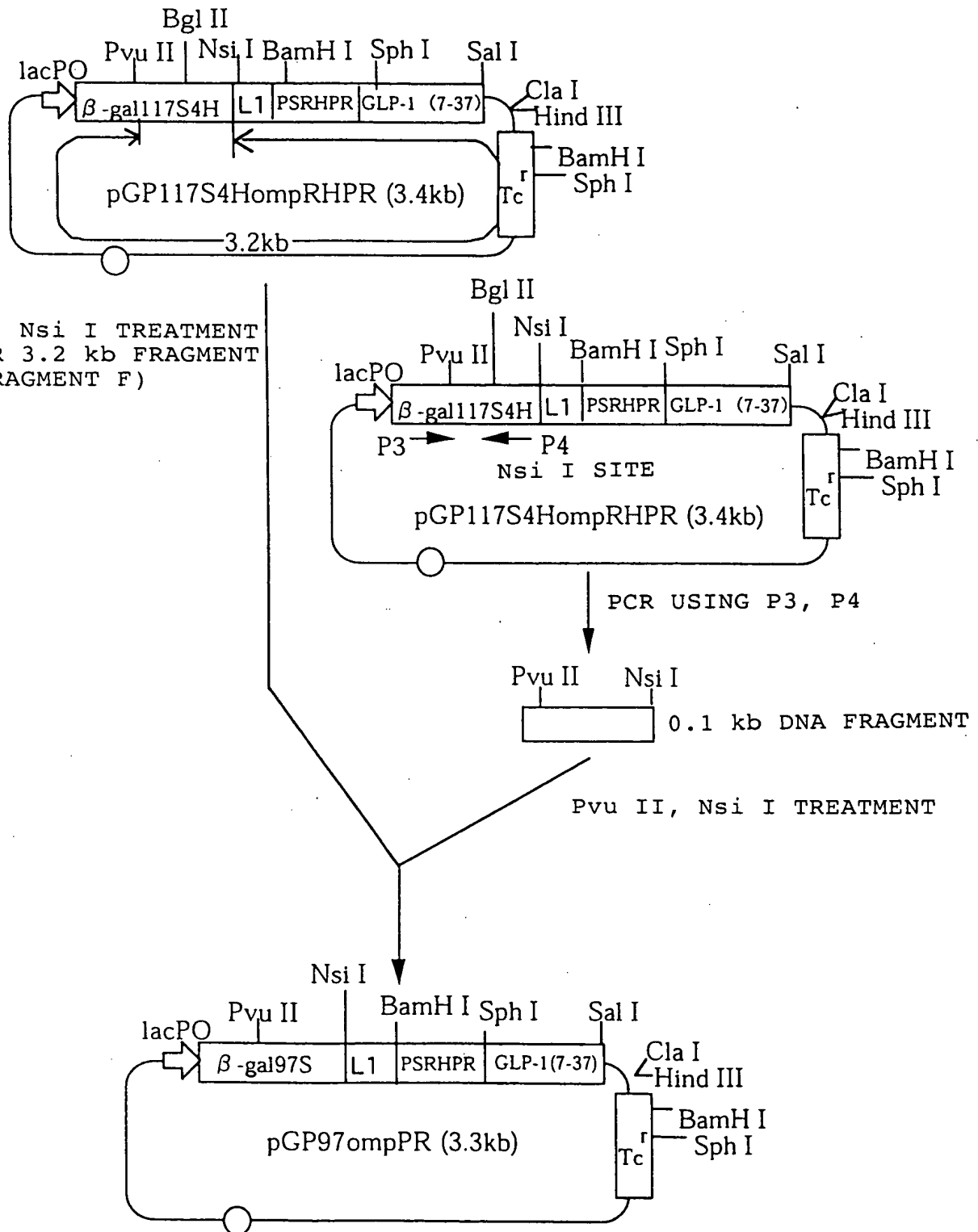


Fig. 5









# Fig.8

lac PO

CCCAGGCTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTGTGAGCG

1

GATAACAATTTACACAGGAAACAGCT ATG ACC ATG ATT ACG GAT TCA CTG GCC  
Met Thr Met Ile Thr Asp Ser Leu Ala

GTC GTT TTA CAA CGT AAA GAC TGG GAT AAC CCT GGC GTT ACC CAA CTT  
Val Val Leu Gln Arg Lys Asp Trp Asp Asn Pro Gly Val Thr Gln Leu

AAT CGC CTT GCA GCA CAT CCC CCT TTC GCC AGC TGG CGT AAT AGC GAC  
Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Asp

GAC GCC CGC ACC GAT CGC CCT TCC CAA CAG TTG CGC AGC CTG AAT GGC  
Asp Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly

GAA TGG CGC TTT GCC TGG TTT CCG GCA CCA GAA GCG GTG CCG GCA AGC  
Glu Trp Arg Phe Ala Trp Phe Pro Ala Pro Glu Ala Val Pro Ala Ser

TTG CTG GAG TCA GAT CTT CCT GAG GCC GAT ACT GTC GTC GTC CCC TCA  
Leu Leu Glu Ser Asp Leu Pro Glu Ala Asp Thr Val Val Val Pro Ser

AAC TGG CAG ATG CAC GGT TAC GAT GCG ATG CAT GGT TAT GAC GCG GAG  
Asn Trp Gln Met His Gly Tyr Asp Ala Met His Gly Tyr Asp Ala Glu

CTC CGC CTG TAT CGC CGT CAT CAC GGT TCC GGA TCC CCT TCT CGA CAT  
Leu Arg Leu Tyr Arg Arg His His Gly Ser Gly Ser Pro Ser Arg His

CCG CGG CAT GCG GAA GGT ACC TTT ACC AGC GAT GTG AGC TCG TAT CTG  
Pro Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu

GAA GGT CAG GCG GCA AAA GAA TTC ATC GCG TGG CTG GTG AAA GGC CGT  
Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg

462

GGT TAA GTCGAC AGCCCGCCTAATGAGCGGGCTTTTTTTTCTCGGAATTAATTCTCATGT  
Gly \*\*\*

STOP CODON

TTGACAGCTTATCATCGATAAGCTTTA

(SEQ ID NO: 19)

Fig. 9

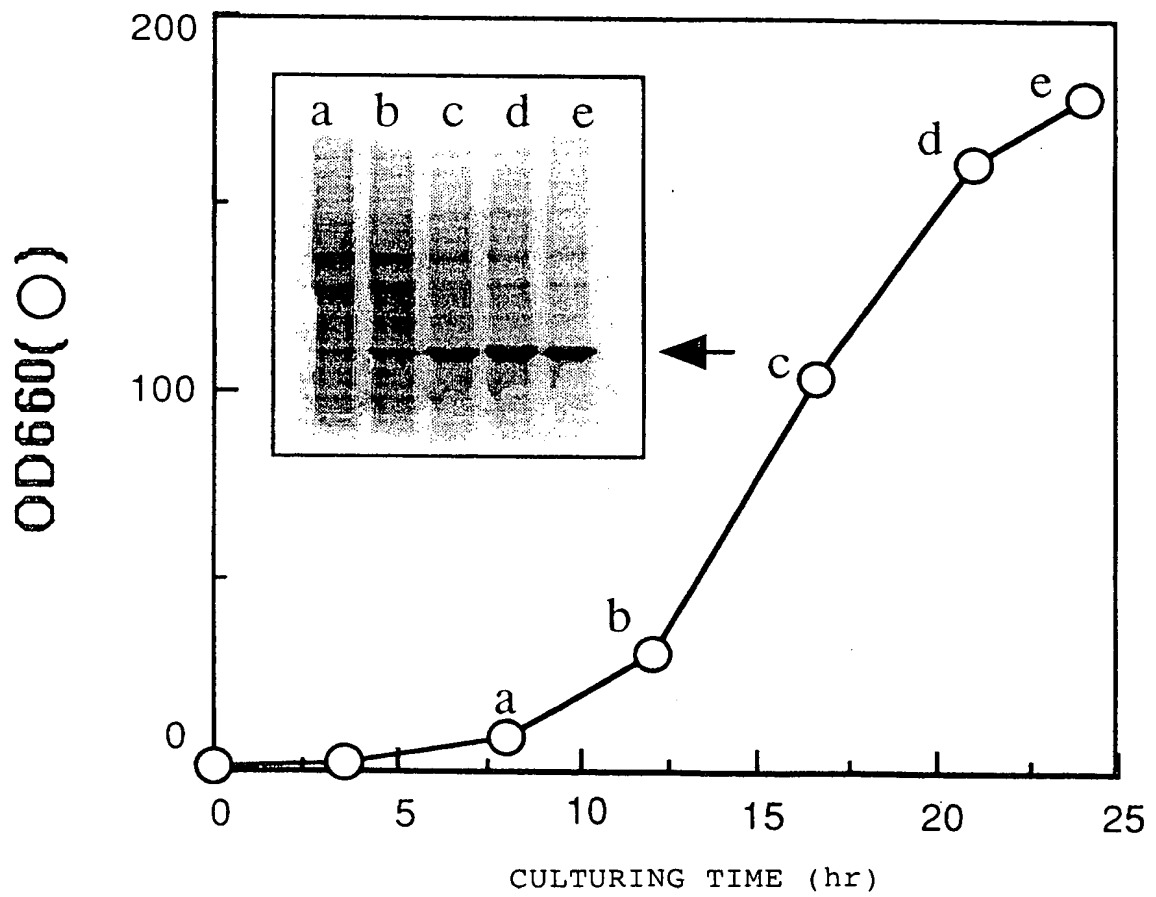
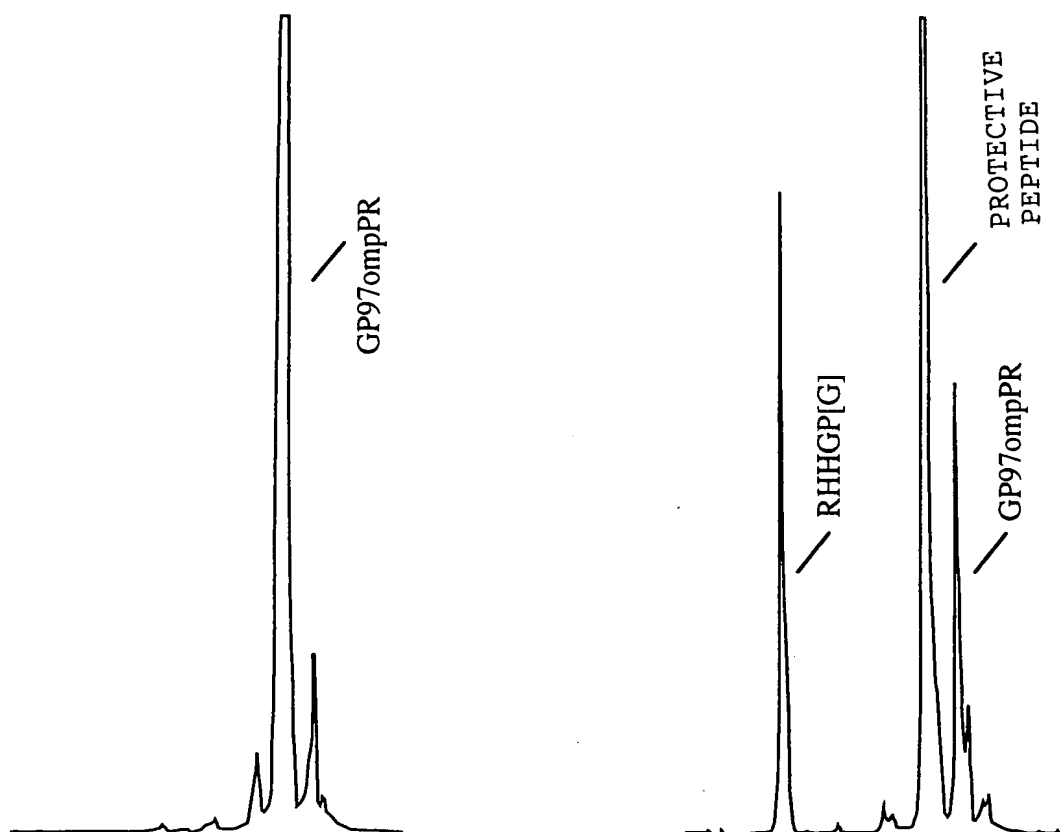


Fig.10

BEFORE REACTION

AFTER REACTION



## Fig.11

15  
 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys  
 30  
 Asp Trp Asp Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala  
 45  
 His Pro Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr  
 60  
 Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg  
 75  
 Phe Ala Trp Phe Pro Ala Pro Glu Ala Val Pro Ala Ser Leu Leu  
 90  
 Glu Ser Asp Leu Pro Glu Ala Asp Thr Val Val Val Pro Ser Asn  
 105  
 Trp Gln Met His Gly Tyr Asp Ala Pro Ile Tyr Thr Asn Val Thr  
 120  
 Tyr Pro Ile Thr Val Asn Pro Pro Phe Val Pro Thr Glu Pro His  
 135  
 His His His His Gly Gly Arg Gln Met His Gly Tyr Asp Ala Glu  
 150  
 Leu Arg Leu Tyr Arg Arg His His Arg Trp Gly Arg Ser Gly Ser  
 165  
Pro Ser Arg His Lys Arg His Ala Glu Gly Thr Phe Thr Ser Asp  
 180  
Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala  
Trp Leu Val Lys Gly Arg Gly

(SEQ ID NO: 21)

AMINO ACID SEQUENCE OF FUSION PROTEIN  
 ENCODED BY pG117S4HR6GLP-1

214 Recg 10110 2 8 2 0791709 b559R 112

## Fig.12

Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys 15  
 Asp Trp Asp Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala 30  
 His Pro Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr 45  
 Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg 60  
 Phe Ala Trp Phe Pro Ala Pro Glu Ala Val Pro Ala Ser Leu Leu 75  
 Glu Ser Asp Leu Pro Glu Ala Asp Thr Val Val Val Pro Ser Asn 90  
 Trp Gln Met His Gly Tyr Asp Ala Pro Ile Tyr Thr Asn Val Thr 105  
 Tyr Pro Ile Thr Val Asn Pro Pro Phe Val Pro Thr Glu Pro His 120  
 His His His His Gly Gly Arg Gln Met His Gly Tyr Asp Ala Glu 135  
 Leu Arg Leu Tyr Arg Arg His His Gly Ser Gly Ser Pro Ser Arg 150  
His Lys Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser 165  
Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val 180  
Lys Gly Arg Gly

(SEQ ID NO: 22)

AMINO ACID SEQUENCE OF FUSION PROTEIN  
 ENCODED BY pGP117S4HompRHKR

## Fig.13

15  
 Met Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Lys  
 30  
 Asp Trp Asp Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala  
 45  
 His Pro Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr  
 60  
 Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg  
 75  
 Phe Ala Trp Phe Pro Ala Pro Glu Ala Val Pro Ala Ser Leu Leu  
 90  
 Glu Ser Asp Leu Pro Glu Ala Asp Thr Val Val Val Pro Ser Asn  
 105  
 Trp Gln Met His Gly Tyr Asp Ala Pro Ile Tyr Thr Asn Val Thr  
 120  
 Tyr Pro Ile Thr Val Asn Pro Pro Phe Val Pro Thr Glu Pro His  
 135  
 His His His His Gly Gly Arg Gln Met His Gly Tyr Asp Ala Glu  
 150  
 Leu Arg Leu Tyr Arg Arg His His Gly Ser Gly Ser Pro Ser Arg  
 165  
His Pro Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser  
 180  
Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val  
Lys Gly Arg Gly

(SEQ ID NO: 23)

AMINO ACID SEQUENCE OF FUSION PROTEIN  
 ENCODED BY pGP117S4HomprHPR

Fig.14

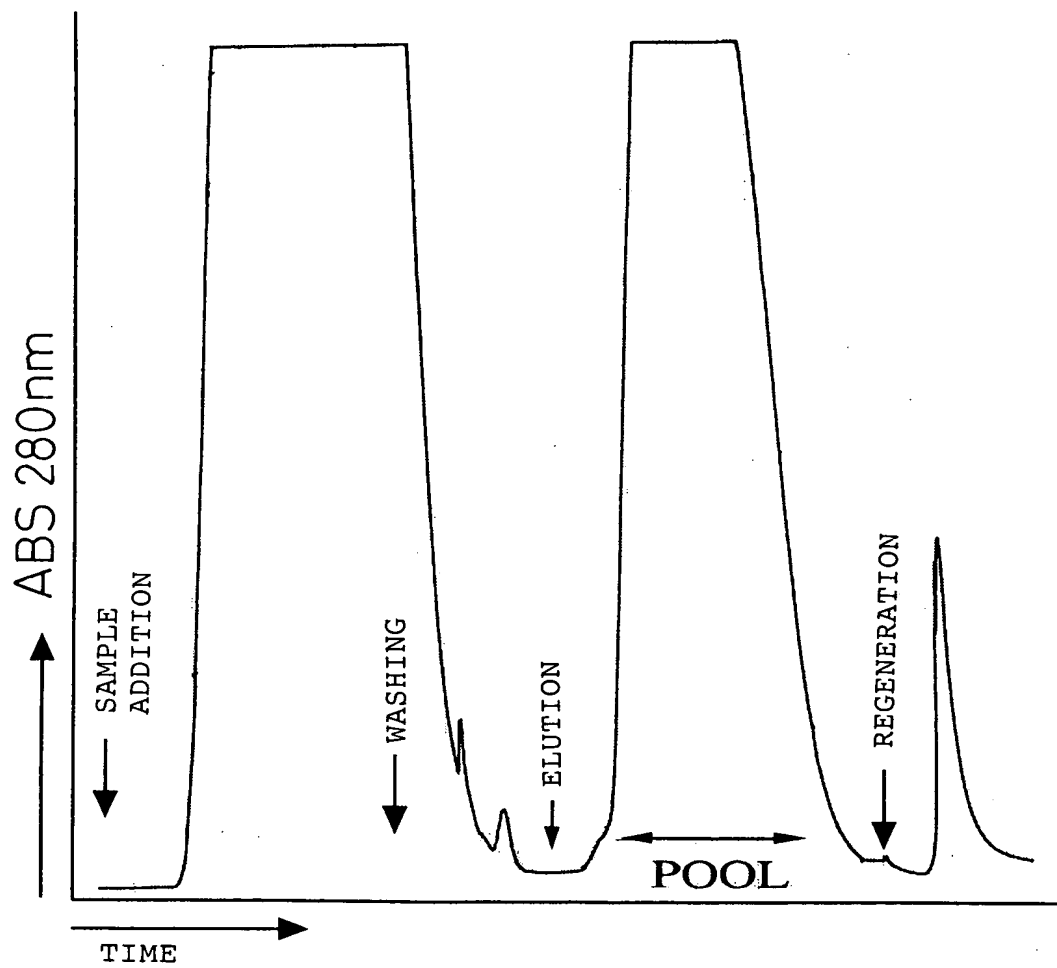


Fig.15

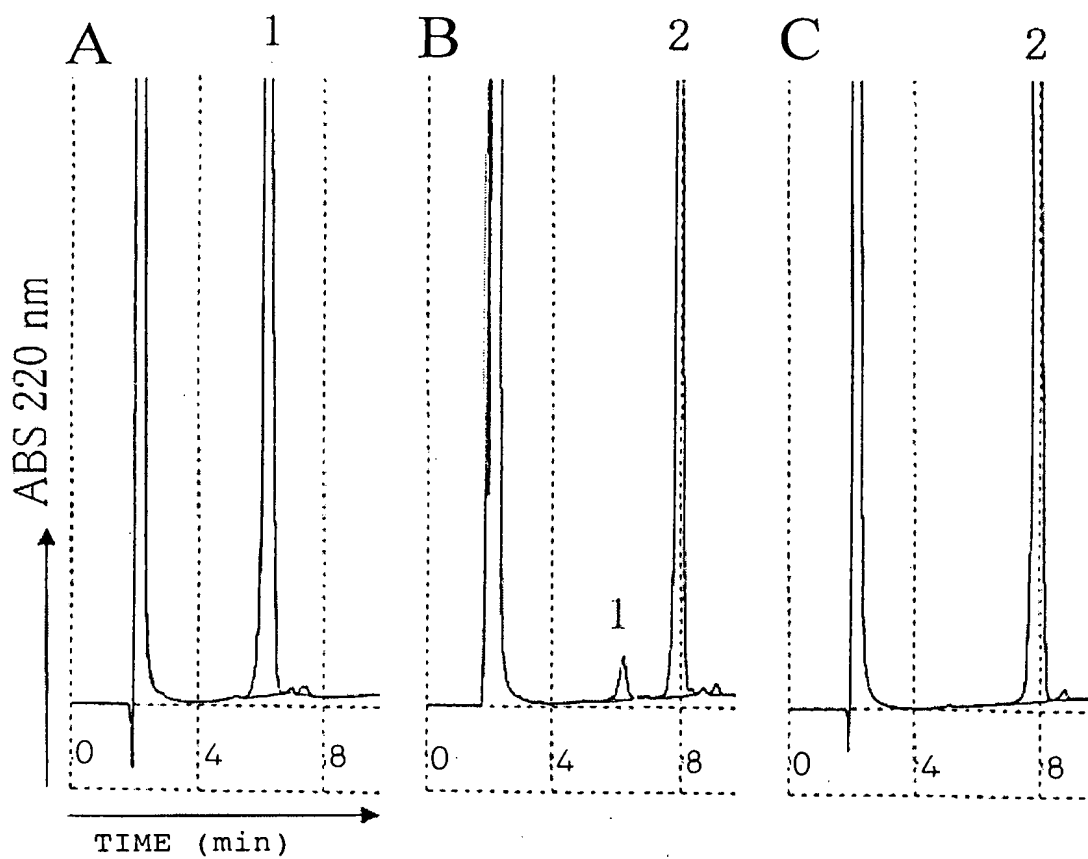




Fig.16

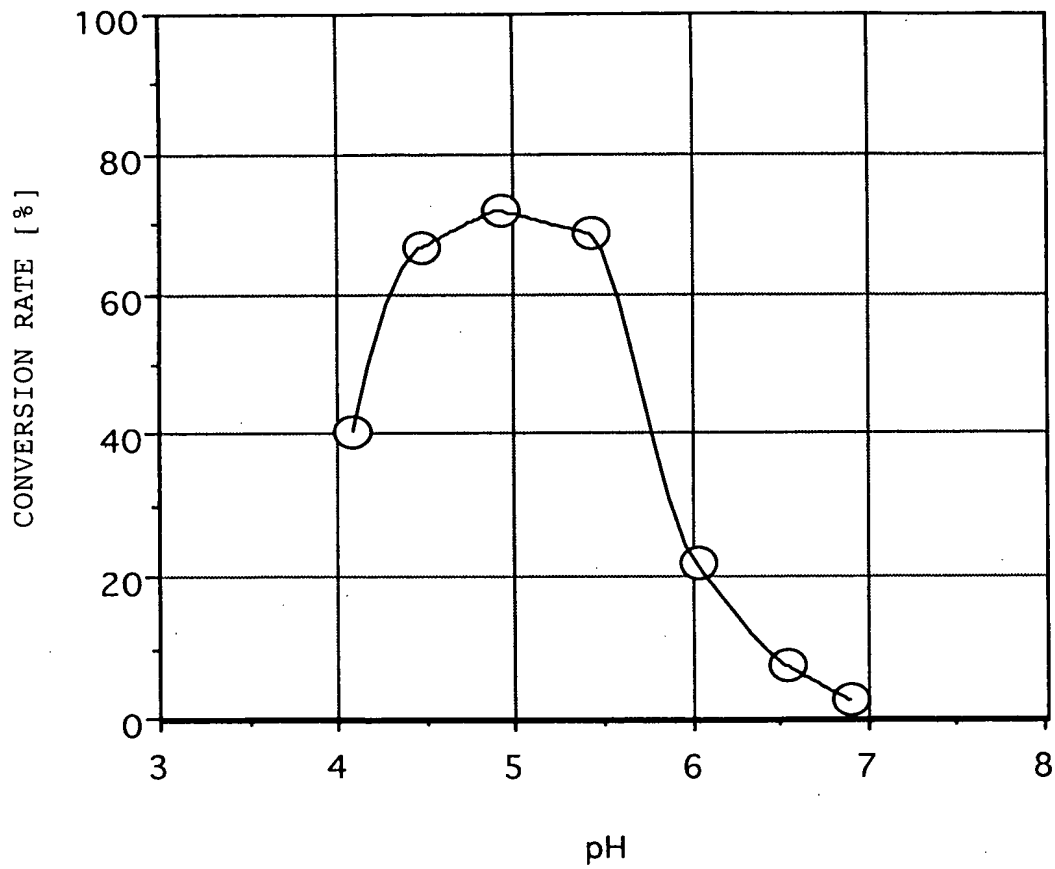
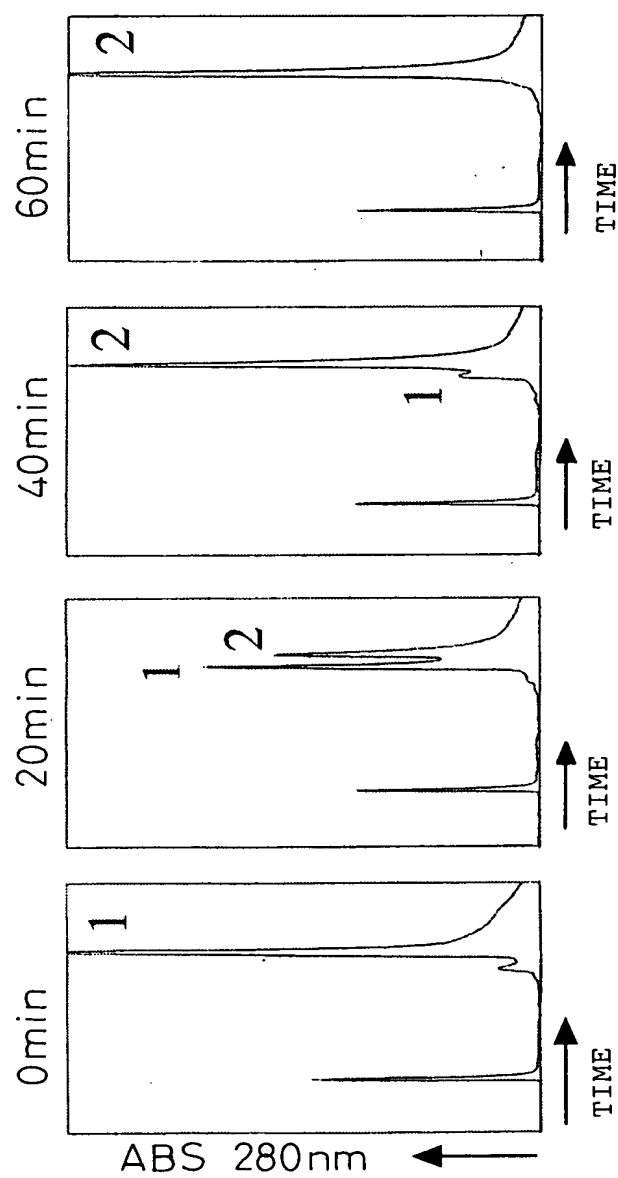


Fig.17



214 Rec'd PC1710 5 8 SEP 1989

Fig.18

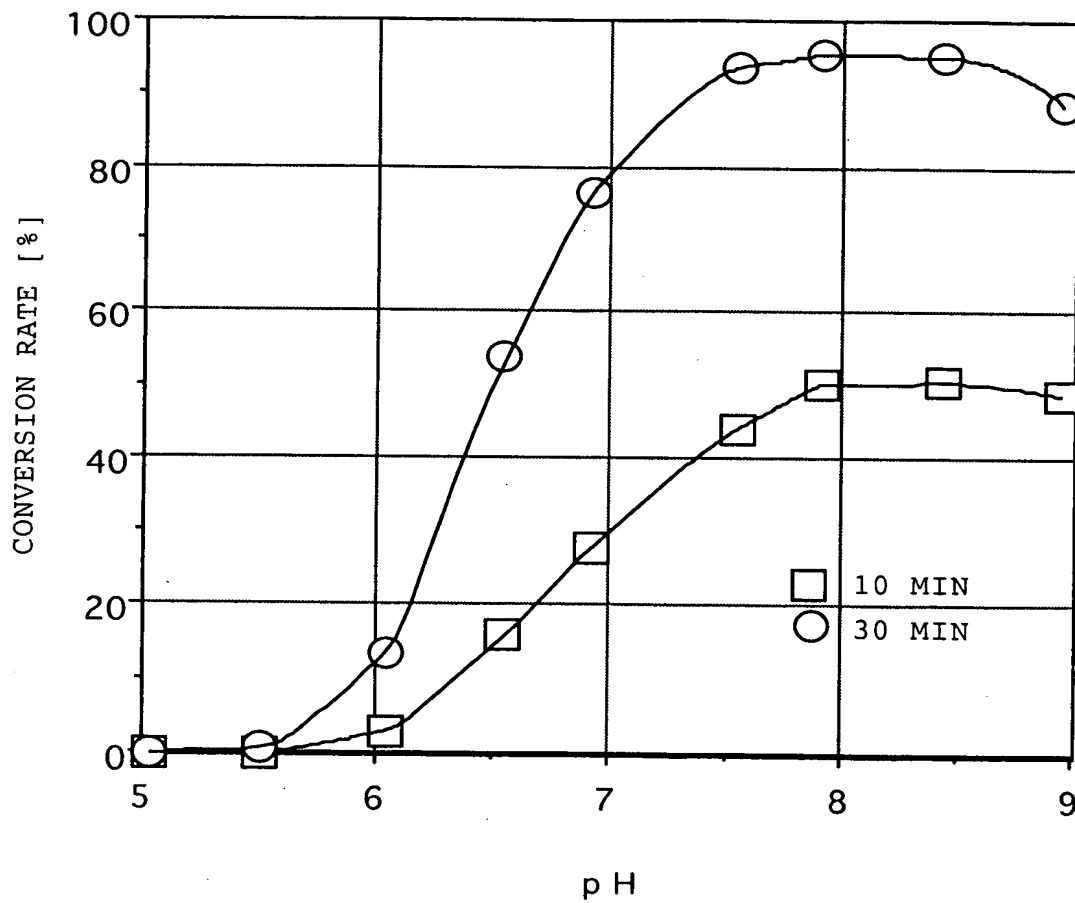


Fig.19

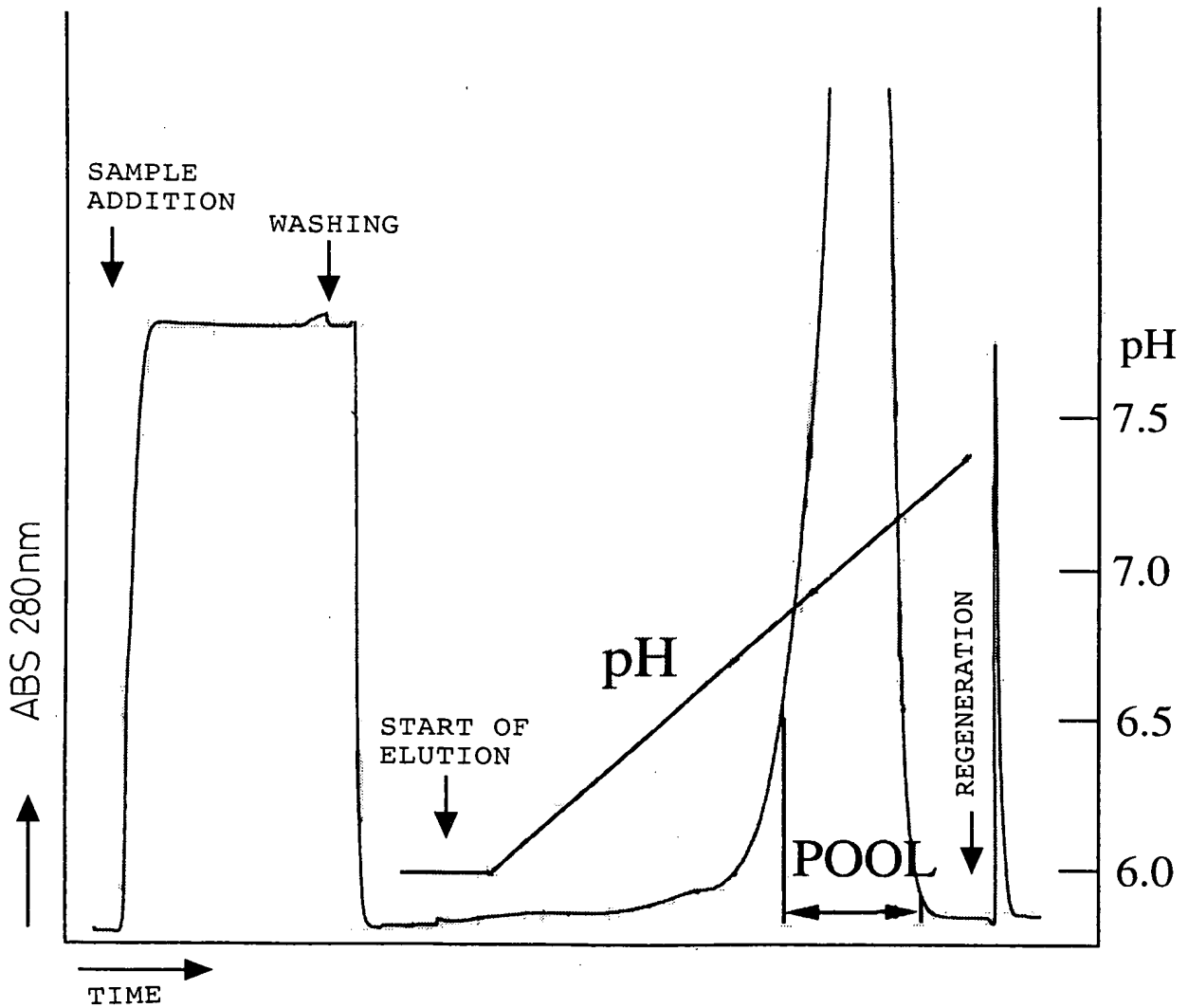


Fig. 20

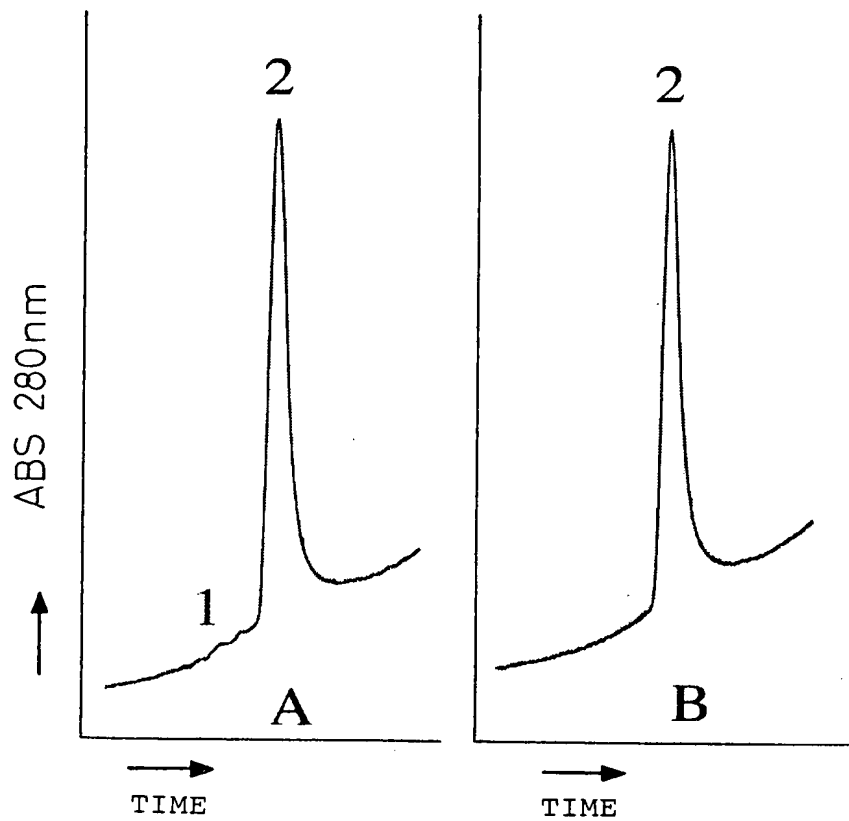


Fig.21

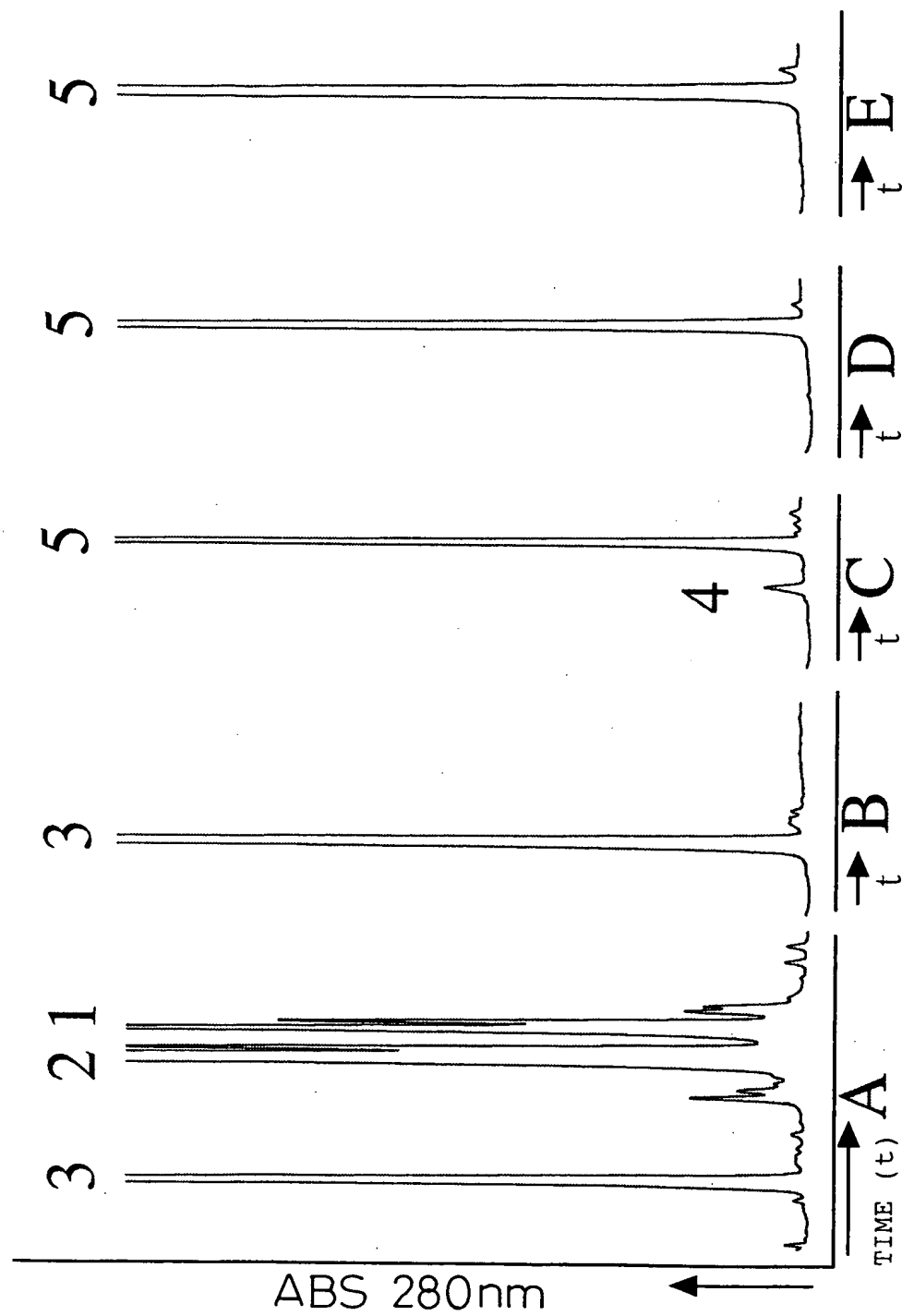


Fig.22

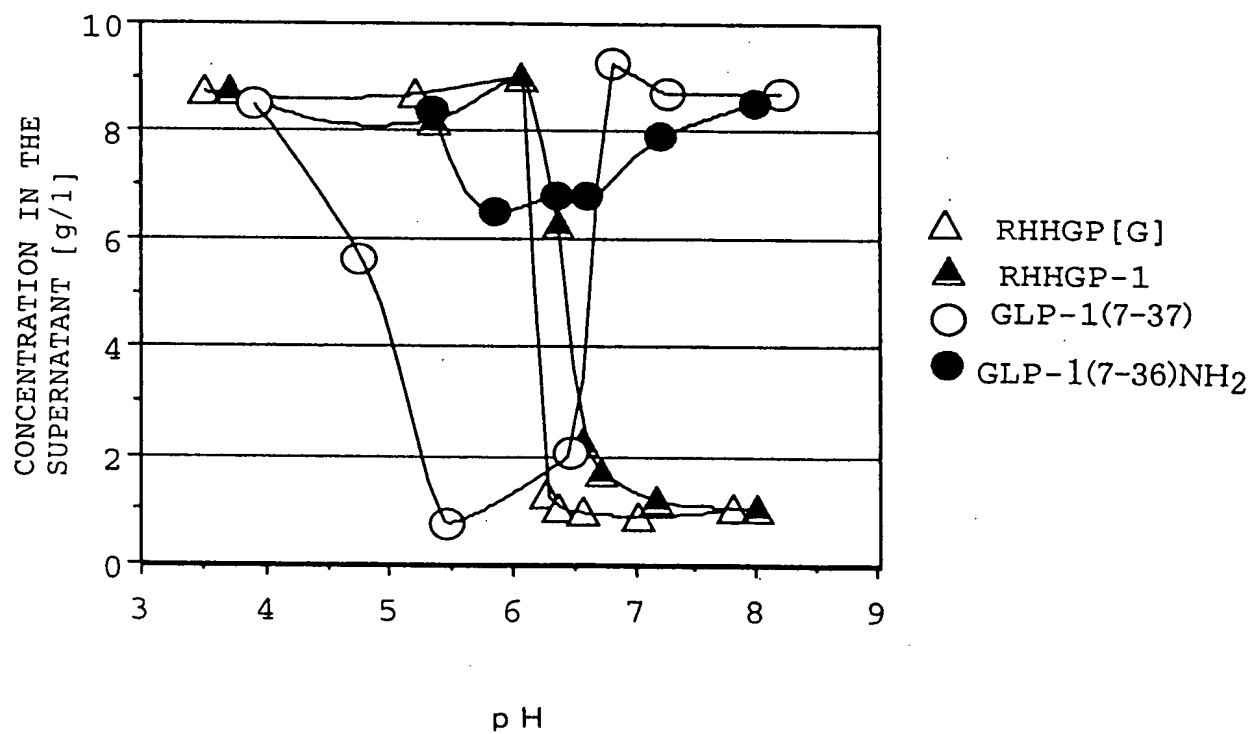
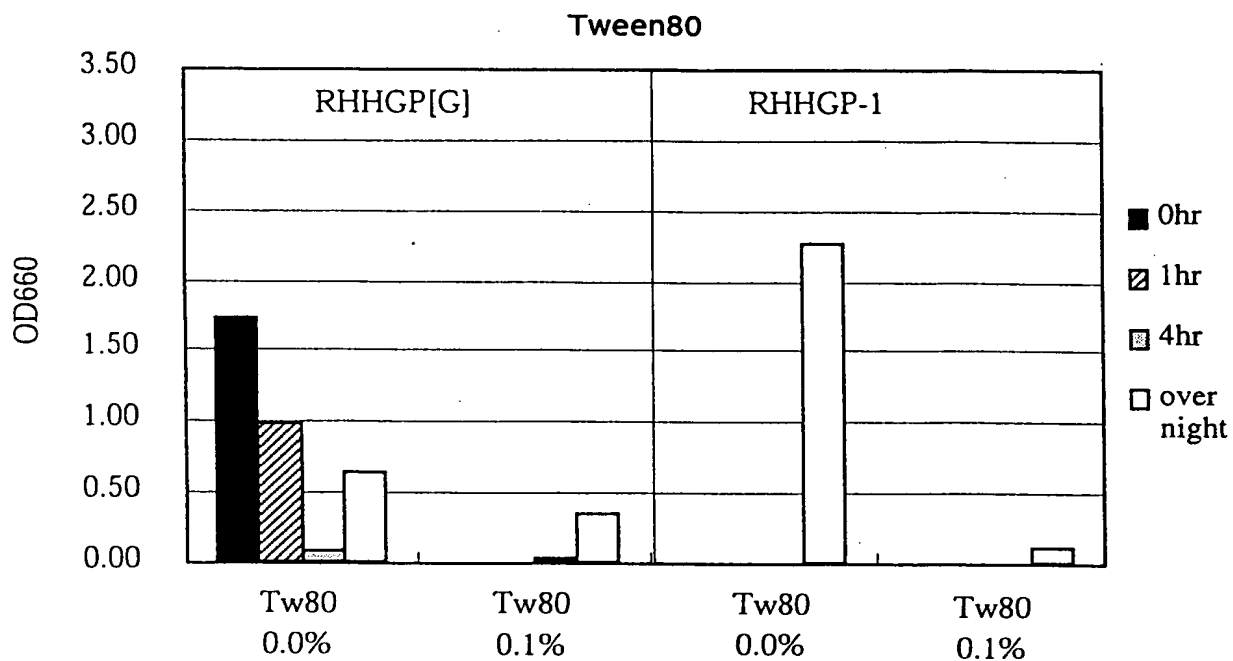


Fig.23

A



B

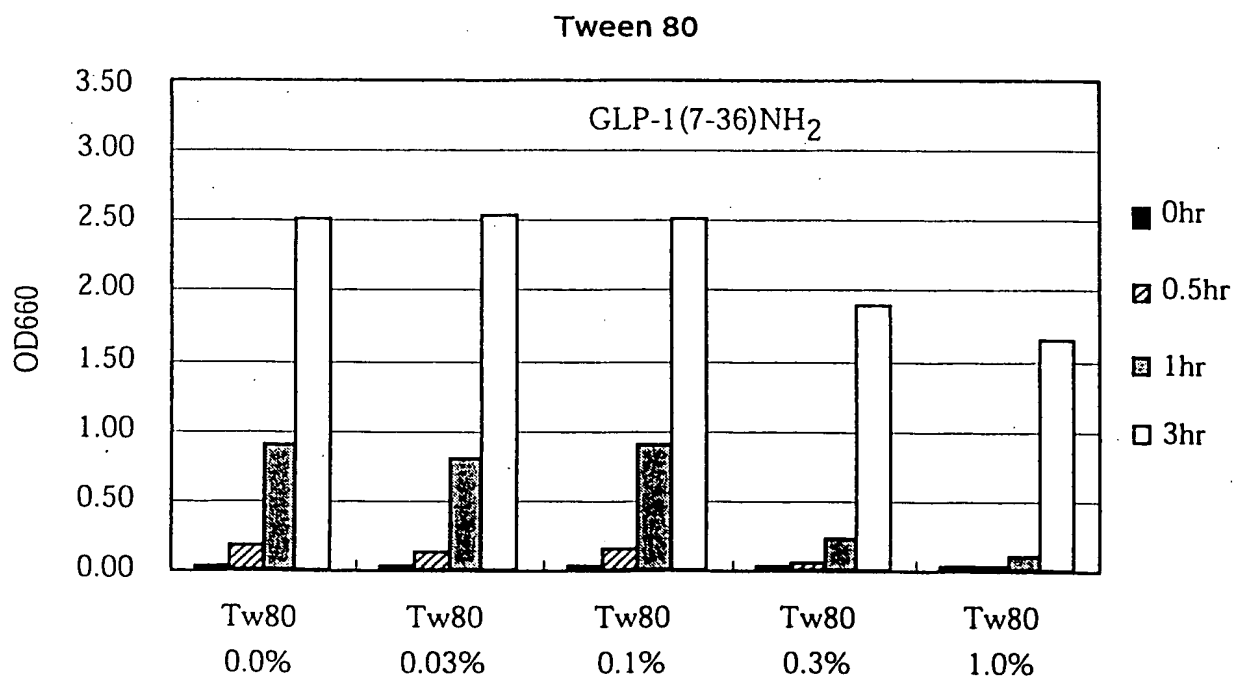
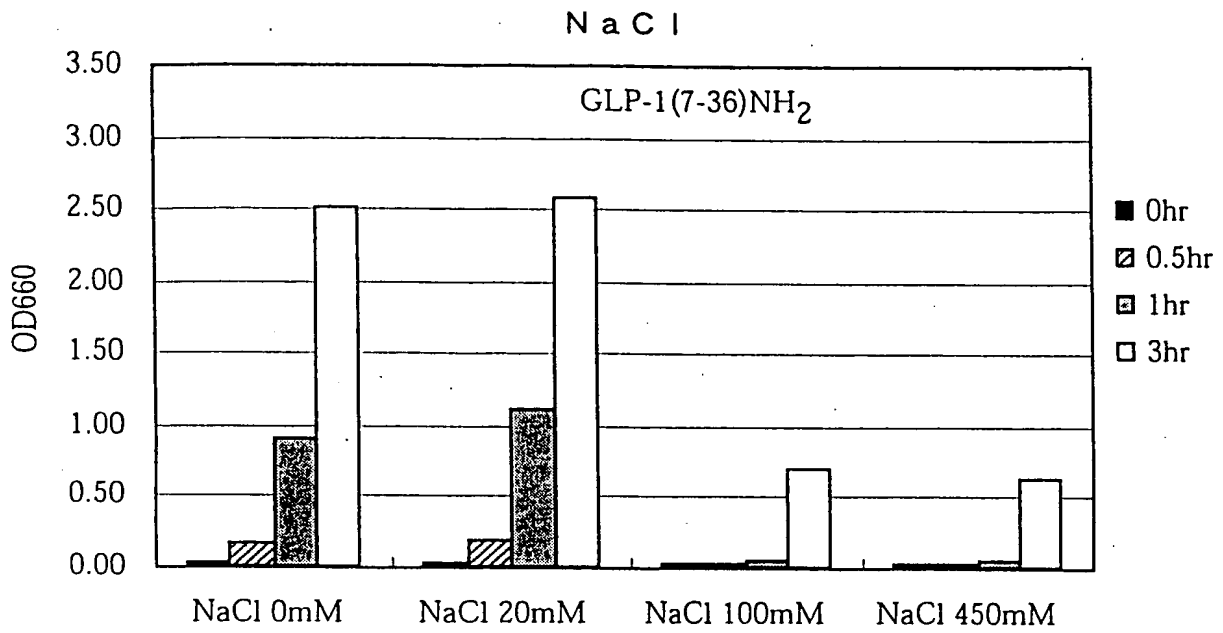




Fig. 24

A



B

